

1. Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants' admissions in their 131 Declaration. The papers filed by applicants admit that both the base paper and the ink receptive coating of their invention were known at the time of their invention. Based upon this admission, it would have been obvious to one of ordinary skill in the art to coat the commercially available base paper with a known ink receptive composition at a conventional coating weight in order to obtain an ink receptive medium. With respect to this rejection, applicants argue that the examiner's conclusion that the claimed coat weight is conventional is "an unsupported contention." It is the examiner's belief that this range would be considered conventional by one of ordinary skill in the art. In addition, however, this contention is not unsupported in the record. Sekiguchi discloses that the ink receiving layer of his medium is 1 to 50 g/m². (See col. 17, lines 18-26). Graumann et al. disclose a preferred range for the ink receiving layer of 4 to 10 g/m². Therefore, that this is a conventional range is supported by the art of record.

2. Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (6,485,812) in view of Graumann et al. (EP 0878319) for reasons of record and for reasons given below. The primary reference discloses supports of paper, calendared paper and coated paper (see col. 16, lines 40-65). However, the reference does not recite properties of the paper such as smoothness and porosity. Graumann et al. teach that specific commercially available papers relied upon by applicants (see page 10 of the specification) will inherently have the properties instantly claimed and have been used as supports for ink jet recording materials. Based upon

the disclosure of the primary reference to supports of paper, coated paper and calendared paper, it would have been obvious to one of ordinary skill in the art to use a commercially available paper known as a support in ink jet recording applications. Since the primary reference discloses cross-linking of the coating, that the secondary reference has a coating that is not cross-linked does not overcome the combination rejection. The secondary art is only relied upon to teach that specific commercially available papers were known for use as ink jet recording media substrates. Note that the determination of whether or not a crosslinking agent will be included is not generally linked to which substrate is selected as in Sekiguchi (see col. 12, lines 39-42 and col. 16, lines 40-65).

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (6,485,812) in view of Graumann et al. (EP 0878319) and further in view of Shih et al. (6,780,924) and Koike et al. (6,777,039). Sekiguchi set forth categories of materials that may be present but does not disclose groups of materials for each category. Therefore, it is appropriate to look at materials that are known in the art for each of these categories. Shih et al. disclose that mordants as recited by claim 4 are known in the art as pigments and mordants respectively in ink receptive layers (see col. 5, lines 34-56). Therefore, it would have been obvious to one of ordinary skill in the art to include poly(diallyldimethylammonium chloride, a well known mordant, as the mordant of the primary reference. Koike et al. disclose an ink jet recording sheet which includes polyvinyl alcohol as binder and boron compounds, including boric acid, to cross-link the binder (see col. 5, lines 9-28 and col. 10, lines 40-52). Based upon this

disclosure of the effectiveness of boron compounds in cross linking polyvinyl alcohol, it would have been obvious to include boric acid as the crosslinker disclosed by the primary reference for its concomitant function therein.

4. Claims 1-3, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (6,485,812) in view of Graumann et al. (EP 0878319) as relied upon above and further in view of Nigam et al. (6,936,316). Sekiguchi set forth categories of materials that may be present but does not disclose groups of materials for each category. Therefore, it is appropriate to look at materials that are known in the art for each of these categories. Nigam et al. teach inclusion of polyethylene oxide siloxane surfactants in ink receptive layers of ink jet recording media (see Example 3). It would have been obvious to one of ordinary skill in the art to include this surfactant as the surfactant of the primary reference in order to improve coatability as suggested by the primary reference.

5. Applicant's arguments filed April 24, 2008 have been fully considered but they are not persuasive for the reasons set forth above in the statements of rejection. Applicants argue that it is hindsight to combine a known support with a known coating. It would have been obvious to one of ordinary skill in the art to combine the support and coating because this is how supports and coating compositions are conventionally used and because the coat weight recited by the claims is within the range that is conventional in the art.

With respect to Sekiguchi et al., the reference discloses inclusion of tetra alkoxytitanium in the coating to bond with the pigment and/or binder. The reference

discloses that boric acids or borates have been used to cross-link polyvinyl alcohol but that merely cross-linking borate or boric acid is insufficient to provide scratch resistance (col. 2, lines 16-23). However, the reference discloses that in addition to the tetra alkoxytitanium, generically disclosed crosslinking agents may also be included (col. 12, lines 39-42). Since tetra alkoxytitanium is already disclosed for inclusion in the coating, these generic cross-linking agents would be additional conventional agents such as those disclosed at col. 2, lines 16-23 and 37-43 of the reference. Therefore, it would have been obvious to one of ordinary skill in the art to include conventional cross-linking agents (such as borates) in the coating of Sekiguchi et al. in addition to the tetra alkoxytitanium as disclosed the reference.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela Schwartz whose telephone number is (571) 272-1528.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano, can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Pamela R. Schwartz/

Primary Examiner, Art Unit 1794

PRSchwartz
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